

CORRECTED VERSION

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
6 October 2005 (06.10.2005)

PCT

(10) International Publication Number
WO 2005/092842 A1

- (51) International Patent Classification⁷: C07C 263/20, 265/04
- (21) International Application Number:
PCT/JP2005/005655
- (22) International Filing Date: 22 March 2005 (22.03.2005)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
- | | | |
|-------------|-------------------------------|----|
| 2004-089363 | 25 March 2004 (25.03.2004) | JP |
| 60/558,550 | 2 April 2004 (02.04.2004) | US |
| 2004-339776 | 25 November 2004 (25.11.2004) | JP |
| 60/632,949 | 6 December 2004 (06.12.2004) | US |
| 2005-023176 | 31 January 2005 (31.01.2005) | JP |
- (71) Applicant (for all designated States except US): **SHOWA DENKO K.K.** [JP/JP]; 13-9, Shibadaimon 1-chome, Minato-ku, Tokyo 1058518 (JP).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **NOZAWA, Kaneo** [JP/JP]; c/o SHOWA DENKO K.K., 111, Aza-Nagayachi, Ooaza-Higashinagahara, Kawahigashi-machi, Kawanumagun, Fukushima 9693431 (JP). **MORINAKA, Katsutoshi** [JP/JP]; c/o SHOWA DENKO K.K., 111, Aza-Nagayachi, Ooaza-Higashinagahara, Kawahigashi-machi, Kawanumagun, Fukushima 9693431 (JP).
- (74) Agent: **SUZUKI, Shunichiro**; S.SUZUKI & ASSOCIATES, Gotanda Yamazaki Bldg. 6F, 13-6, Nishigotanda 7-chome, Shinagawa-ku, Tokyo 1410031 (JP).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

(48) Date of publication of this corrected version:
1 December 2005

(15) Information about Correction:

see PCT Gazette No. 48/2005 of 1 December 2005, Section II

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD FOR PRODUCING (METH)ACRYLATE DERIVATIVE HAVING ISOCYANATE GROUP

(57) Abstract: The invention aims to provide a method whereby (meth)acrylate derivatives having an isocyanate group can be obtained in high yield by dehydrochlorination of 3-chloropropionate derivatives having an isocyanate group under industrially advantageous and mild conditions, and the content of residual hydrolyzable chlorine can be reduced. A method for producing a (meth)acrylate derivative having an isocyanate group comprises performing dehydrochlorination of a 3-chloropropionate derivative having an isocyanate group in the presence of a basic nitrogen compound having a tertiary nitrogen, the tertiary nitrogen of the basic nitrogen compound having at least one group other than an aromatic ring group.

WO 2005/092842 A1